

K073242



Medical Systems

5725 Delphi Drive Troy, MI 48098-2815 USA

## Section V 510(k) Summary (As required by section 807.92(c))

**Submitter:** Delphi Medical Systems  
5725 Delphi Drive  
Troy MI 48098

JAN - 3 2008

**Contact:** Gilbert Roque Jr., Sr. Regulatory Affairs Engineer

**Telephone:** (248) 813-2373  
**Fax:** (248) 813-5008

**Date Prepared:** July 2007

### DEVICE NAME AND CLASSIFICATIONS

**Type of Submission:** Traditional 510(k)

**Proprietary Name:** Delphi Portable Oxygen Concentrator  
Model RS-00400

**Common Name:** Portable Oxygen Concentrator

**Classification Name:** Portable Oxygen Generator

**Product Code:** CAW

**Medical Specialty / Panel:** Anesthesiology

**Device Classification:** Class II

**Regulation Number:** 21 CFR 868.5440

**Predicate Device:** Airsep Corporation, LifeStyle Oxygen Concentrator, 510(k) # K020324

### Intended Use:

The Delphi Portable Oxygen Concentrator is intended to provide supplemental oxygen in a home, institution, or travel environments.

### Device Description:

The Delphi Portable Oxygen Concentrator is lightweight and can deliver  $\geq 87\%$  oxygen to a patient through a standard single-lumen nasal cannula. The device detects a patient breath and operates by delivering a bolus of oxygen during the inhalation period.

# **DELPHI**

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The device can be set to deliver flowrates between 1-5 LPM with increments of 0.5 LPM to a patient. The device can be operated when powered by the 100-240VAC AC/DC power supply provided with the unit and designed to operate with a DC automotive adaptor. In addition, the device contains a rechargeable battery allowing it to be carried by a patient while traveling.

### **Indications for Use:**

The POC is a prescription only device and not intended for life-supporting or life-sustaining. The users of the Delphi Portable Oxygen Concentrator are adults requiring oxygen therapy to treat conditions such as COPD. The POC is designed to enable its users to be more mobile in their daily activities both indoors and outdoors

### **Technological Characteristics:**

The Delphi Portable Oxygen Concentrator (POC) uses Pressure Swing Adsorption technology to deliver concentrated oxygen. A series of chambers and valves allows pressurized air to enter the sieve bed assembly, effectively separating nitrogen from the air. When one chamber is receiving pressurized air, the other is purging nitrogen back into the air. The cycle is repeated continuously. The concentrated oxygen created at each cycle is stored in a chamber to be delivered to a patient when the device detects a patient breath.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

JAN - 3 2008

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Delphi Medical Systems  
C/O Mr. Jeff D. Rongero  
Senior Project Engineer  
Underwriters Laboratories, Incorporated  
12 Laboratory Drive  
Research Triangle, North Carolina 27709

Re: K073242

Trade/Device Name: Portable Oxygen Concentrator  
Regulation Number: 868.5440  
Regulation Name: Portable Oxygen Generator  
Regulatory Class: II  
Product Code: CAW  
Dated: December 17, 2007  
Received: December 19, 2007

Dear Mr. Rongero:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

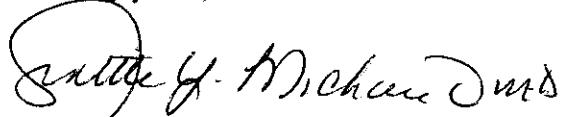
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Chiu-Lin, Ph.D.  
Director  
Division of Anesthesiology, General Hospital,  
Infection Control and Dental Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure



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#### Section IV: Indications for Use Statement

**Applicant:** Delphi Medical Systems

**510(k) Number:** \_\_\_\_\_

**Device Name:** Portable Oxygen Concentrator

#### Indications for Use:

The Portable Oxygen Concentrator is intended to provide supplemental oxygen in a home, institutional, or travel environment.

Prescription Use Only: X

Over-the-Counter Use: \_\_\_\_\_

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(PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH Office of Device Evaluation (ODE)

Office of Anesthesia Devices, General Hospital Branch  
Center for Devices and Radiological Health

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